

What is claimed is:

1. A method of monitoring by a monitoring system a data system among a plurality of data systems connected to a user system among a plurality of user systems all of which systems are interconnected through a network, the method comprising the steps of,  
receiving search criteria from the user system,  
retrieving content data from the data system,  
repeating the retrieving step at regular intervals,  
determining matches for each of the retrieving steps when the content data matches the search criteria at each of the regular intervals, and  
reporting the matches to the user system.

2. The method of claim 1 wherein,  
the content data is web content data,  
the data systems are web servers storing the web content data,  
the network is the internet, the web server having a web site location identified by a uniform resource locator (URL) that indicates the web content data,  
the user system comprises a web browser for communication with the monitoring system over the internet, and  
the monitoring system is a web monitoring server for receiving the search criteria from the user browser and for accessing the web content data of the web server.

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3. The method of claim 1 wherein,  
the search criteria comprises a sleep interval indicating a time  
duration between the regular intervals.

4. The method of claim 1 wherein,  
the search criteria indicates keywords,  
the matches are keywords matches.

5. The method of claim 1 wherein,  
the search criteria comprises keywords, and  
the search criteria comprises a Boolean expression,  
the matching step determines when the content data matches the  
Boolean expression of the keywords as Boolean keyword matches.

6. The method of claim 1 wherein,  
content data is a character string comprising text words,  
the search criteria comprises a sleep interval indicating a  
time duration between the regular intervals,  
the search criteria comprises keywords, and  
the matches are keyword matches to the text words.

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2 7. The method of claim 1 wherein

3 content data is a character string comprising text words and  
4 formatting characters and strings of spaces,

5 the search criteria comprises a sleep interval indicating a  
6 time duration between the regular intervals and comprises keywords,  
7 and

8 the matches are keyword matches to the text words,

9 the method further comprising the steps of,

10 stripping the text words from the character string, the  
11 matching step matches the keywords to the text words for keywords  
12 matches.

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15 8. The method of claim 7 wherein the stripping step,

16 the character string contain formatting characters that are  
17 removed form the character string leaving the text words.

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9. The method of claim 1 wherein,  
content data is a character string comprising text words and  
formatting characters and strings of spaces,  
the search criteria comprises a sleep interval indicating a  
time duration between the regular intervals and comprises keywords  
and comprises a Boolean expression, and  
the matches are Boolean keyword matches of the Boolean  
expression of the keywords to the text words,  
the matching step matches the Boolean expression of the  
keywords to the text words for the Boolean keywords matches,  
the method further comprising the steps of,  
stripping the text words from the character string into a  
formatted string,  
storing the formatted string for each of the retrieval steps  
when the formatted string has changed since a last one of the  
retrieval steps,  
counting the number of keywords in the formatted string for  
each of the retrieval steps for providing keyword counts, and  
the reporting step reports for each of the retrieval step when  
the formatted string has changed and when the keywords counts have  
changed in the content data since a previous one of the retrieval  
steps.

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10. The method of claim 1 wherein,

the content data is top level content data,

the top level content data is a character string comprising text words and formatting characters and strings of spaces and links for linkage to linked content data, the linked content data also comprising text words and formatting characters and strings of spaces, the linked content data being at a linked depth from the top level content data for each linkage through a link to another one of the linked content data,

the search criteria comprises a sleep interval indicating a time duration between the regular intervals and comprises keywords and comprises a crawling depth for retrieving the top level content data and linked content data to the linked depth of linked content data indicated by the crawling depth,

the matches are keyword matches to the text words,

the method further comprising the steps of,

stripping the text words from the character string for the top level content data into a top level formatted string,

determining a change in the top level formatted string since a previous one of the retrieval steps,

storing the top level formatted string when there is a change in the top level formatted string since the previous one of the retrieval steps,

determining a change in a number of keywords in the top level content data, the matching step matches the keywords to the text words in the top level formatted string,

stripping the text words from the character string for the linked content data to the crawling depth, and

counting the number of keywords in the formatted strings for  
the top level content data and the linked content data to the  
crawling depth when there is a change in the number of keyword  
matches in the top level content data for providing keyword counts,  
the reporting step reports the keywords counts.

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11. The method of claim 1 wherein,

the content data is top level content data,

the top level content data is a character string comprising text words and formatting characters and strings of spaces and links for linkage to linked content data, the linked content data also comprising text words and formatting characters and strings of spaces, linked content data being at a linked depth from the top level content data for each linkage through a link to another one of the linked content data,

the search criteria comprises a sleep interval indicating a time duration between the regular intervals and comprises keywords and comprises a Boolean expression and comprises a crawling depth for retrieving the top level content data and linked content data to the linked depth of linked content data indicated by the crawling depth,

the matches are Boolean keyword matches of the Boolean expression and the keywords to the text words,

the method further comprising the steps of,

stripping the text words from the character string for the top level content data into a top level formatted string,

determining a change in the top level formatted string since a previous one of the retrieval steps,

storing the top level formatted string when there is a change in the top level formatted string since the previous one of the retrieval steps,

determining a change in a number of keywords in the top level content data, the matching step matches the keywords to the text words in the top level formatted string,

stripping the text words from the character string for the  
linked content data to the crawling depth, and  
counting the number of keywords in the formatted strings for  
the top level content data and the linked content data to the  
crawling depth when there is a change in the number of keyword  
matches in the top level content data for providing keyword counts,  
the reporting step reports the keywords counts.

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1 12. A method of monitoring by a monitoring server web content data  
2 of a web server system among a plurality of web servers connected  
3 to a user system among a plurality of user systems having  
4 respective user browsers, all of which are interconnected through  
5 the internet using internet protocol addresses, the web content  
6 data indicated by a URL a portion of which indicates the web server  
7 the method comprising the steps of

8       receiving search criteria from the user system, the search  
9 criteria comprises keywords and comprises a crawling depth for  
10 retrieving top level content data and linked content data to the  
11 linked depth of the linked content data indicated by the crawling  
12 depth,

13       retrieving top level content data and the linked content  
14 data from the data system, the top level content data is a  
15 character string comprising text words and formatting characters  
16 and strings of spaces and links for linkage to linked content data,  
17 the linked content data also comprising text words and formatting  
18 characters and strings of spaces,

19       determining matches when the top level content data matches  
20 the search criteria, and

21       reporting the top level matches to the user system.  
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23 13. The method of claim 12, wherein the determining step further  
24 determines keyword matches to the linked content data.  
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26 14. The method of claim 12, wherein the determining step further  
27 determines keyword count of the keywords in the linked content  
28 data.

1 15. A method of monitoring by a monitoring server web content data  
2 of a web server system among a plurality of web servers connected  
3 to a user system among a plurality of user systems having  
4 respective user browsers, all of which are interconnected through  
5 the internet using internet protocol addresses, the web content  
6 data indicated by a URL a portion of which indicates the web server  
7 the method comprising the steps of,

8 receiving search criteria from a user system, the search  
9 criteria comprising a URL to be monitored, a sleep interval,  
10 keywords and a Boolean expression,

11 retrieving the web content data indicated by the URL from the  
12 web server,

13 repeating the retrieving step at regular intervals indicated by  
14 the sleep interval,

15 determining Boolean keyword matches of the web content data  
16 after the retrieving step for the Boolean expression and keywords,  
17 and

18 reporting to the user system of the Boolean keyword matches.  
19 the content data is top level content data, the top level content  
20 data is a character string comprising text words and formatting  
21 characters and strings of spaces and links for linkage to linked  
22 content data, the linked content data also comprising text words  
23 and formatting characters and strings of spaces, linked content  
24 data being at a linked depth from the top level content data for  
25 each linkage through a link to another one of the linked content  
26 data.

1 16. The method of claim 15 wherein,  
2 the search criteria comprises a sleep interval indicating a  
3 time duration between the regular intervals and comprises keywords  
4 and comprises a Boolean expression and comprises a crawling depth  
5 for retrieving the top level content data and linked content data  
6 to the linked depth of linked content data indicated by the  
7 crawling depth,  
8 the matches are Boolean keyword matches of the Boolean  
9 expression and the keywords to the text words,  
10 the method further comprising the steps of,  
11 stripping the text words from the character string for the top  
12 level content data into a top level formatted string,  
13 determining a change in the top level formatted string since a  
14 previous one of the retrieval steps,  
15 storing the top level formatted string when there is a change  
16 in the top level formatted string since the previous one of the  
17 retrieval steps,  
18 determining a change in a number of keywords in the top level  
19 content data, the matching step matches the keywords to the text  
20 words in the top level formatted string,  
21 stripping the text words from the character string for the  
22 linked content data to the crawling depth, and  
23 counting the number of keywords in the formatted strings for  
24 the top level content data and the linked content data to the  
25 crawling depth when there is a change in the number of keyword  
26 matches in the top level content data for providing keyword counts,  
27 the reporting step reports the keywords counts.  
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1 17. The method of claim 16 wherein the reporting step comprises the  
2 steps of,

3 providing the user with a notification through the internet of  
4 keyword matches,

5 storing keywords counts for the keywords for the respective top  
6 level web content data and the linked content data,

7 receiving a display request from the user system through the  
8 internet, and

9 communicating through the internet to the user system display  
10 data for displaying on the user system indication of the keyword  
11 counts.

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13 18. The method of claim 16 wherein the formatting characters  
14 comprises HTML tag characters.

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